

FINDING OF NO SIGNIFICANT IMPACT
TENNESSEE VALLEY AUTHORITY
BRIDGEPORT ALABAMA POWER SUPPLY UPGRADE
JACKSON COUNTY, ALABAMA

TVA proposes to provide an alternate supply of electric power to industries in the Bridgeport, Alabama, area by constructing a new 161-kV transmission line from TVA's existing Widows Creek-Winchester 161-kV Transmission Line to TVA's existing Beaulieu #2 Substation. The 4.8-mile line would be built on new right-of-way 100 feet wide and occupying 58 acres. The proposed in-service date is January 2009.

The primary industrial electrical power supply in the Bridgeport area is from the Reese Ferry 161-kV Tap Line, which connects to the TVA Widows Creek-Raccoon Mountain No. 1 161-kV Transmission Line. The Reese Ferry Tap Line serves four industries that collectively use 70 MW of power and are sensitive to any power outage. Some of the older sections of the Reese Ferry Tap Line have wood pole structures in need of replacement and located in steep terrain with difficult access. Other parts of the line are also difficult to access due to their location in an inundated floodplain. For these reasons, the reliability of the industrial electrical supply is at risk and TVA proposes to construct and operate a second supply line. TVA has reviewed the proposed action and reasonable alternatives in an environmental assessment (EA) in accordance with its procedures implementing the National Environmental Policy Act. This EA is incorporated by reference.

Two primary alternatives, i.e., the No Action Alternative and an Action Alternative, were developed. Other potential action alternatives were eliminated from further consideration because of engineering and environmental concerns. Under the No Action Alternative, TVA would not provide an alternate power supply to the Bridgeport industries. Implementation of this alternative would not alleviate power reliability problems and could lead to extended outages unless the local distributor or the potentially affected industries provided an alternate power supply. Should this occur, potential impacts could be similar to or greater than the impacts of TVA's proposed action.

Under the Action Alternative, TVA would construct, operate, and maintain the proposed transmission line. Most structures would be single steel poles 80 to 100 feet tall. Laced steel switch structures would be built at each end of the new line and on the existing Reese Ferry Tap Line immediately north of the Beaulieu #1 Substation tap and immediately south of the Tennessee Alloys (Oxbow) Substation tap. The preferred route of the new transmission line analyzed as part of the Action Alternative was selected from among several potential routes in order to minimize impacts to natural and cultural resources, impacts to property owners, and other factors.

Based on the analysis in the EA, TVA concludes that the Action Alternative would have minor and insignificant impacts on groundwater, surface water, and aquatic life. No unique aquatic habitats occur along the proposed line route and TVA would implement standard best management practices, including the establishment of streamside management zones, to minimize impacts to water quality.

The proposed action would result in the clearing of about 31 acres of forest, including 10 acres of mature oak-hickory forest. Most of the affected forest is part of an extensive contiguous forest on Summerhouse Mountain which would be fragmented by the transmission line. The

line, however, is close to the edge of the contiguous forest and the effects of the fragmentation on vegetation and wildlife would be insignificant. No rare plant communities or wildlife populations would be affected. State- and federally listed endangered and threatened species occur in the surrounding area. Impacts to state-listed species would be insignificant and there would be no impacts to federally listed species.

The proposed transmission action would affect six wetland areas totaling about 2.3 acres. These wetlands are either emergent or scrub-shrub. There would be no long-term conversion of wetlands and construction impacts would be minimized by the use of best management practices. Overall wetland impacts would be insignificant. The proposed transmission line would cross several floodplain areas, although the switches would not be located in floodplains. The transmission line construction activities, including the placement of structures in floodplains, would not cause any increase in flood hazard and are considered repetitive actions in the 100-year floodplain. The proposed action is consistent with Executive Order 11988 on floodplain management.

The proposed action would not affect parks, managed areas, ecologically significant sites, or streams listed on the Nationwide Rivers Inventory. Any impacts to recreation activities or opportunities would be temporary and insignificant. The transmission line would alter the appearance of the lower south slope of Summerhouse Mountain; this area, however, is visible from few nearby residences and highways. Several other more visible portions of the line are in more developed areas or near existing transmission and distribution lines and the overall effects on visual resources would be insignificant. Impacts on land use would be minor and there would be no loss of prime farmland. No adverse impacts from the electric and magnetic fields resulting from operation of the transmission line are anticipated, and the proposed action would not disproportionately affect any minority or economically disadvantaged populations.

The proposed action would not adversely affect any historic properties eligible for or listed on the National Register of Historic Places. The Alabama Historical Commission concurred with this determination in a letter dated September 12, 2007.

Mitigation

TVA would implement best management practices and other routine measures listed in the Appendices of the EA during construction and operation of the proposed transmission line. TVA has not identified the need for non-routine mitigation measures to further reduce the anticipated environmental impacts.

Conclusion and Findings

Based on the findings listed above and the analyses in the EA, we conclude that the proposed action involving the construction and operation of a new transmission line would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required.

Charles P. Nicholson for

February 21, 2008

John W. Myers, Senior Manager
Environmental Strategy and Management
Environmental Stewardship and Policy
Tennessee Valley Authority

Date Signed